Spec ref: 4.6.1.2

KEY FACTS

- Meiosis produces 4 genetically DIFFERENT haploid cells (gametes)
- Haploid: 23 chromosomes in humans. Fertilisation restores diploid (46).

★ Variation from meiosis: crossing over + independent assortment

★ Crossing over: DNA exchanged between homologous chromosomes → new allele combinations

★ Independent assortment: 2^{23} possible chromosome combinations

KEY TERMS

Meiosis	Cell division → 4 different haploid cells for sexual reproduction
Haploid	Half the normal chromosome number (23 in human gametes)
Crossing over	Exchange of DNA between homologous chromosomes during meiosis — creates variation

■ EXAM TIP: MEIOSIS = 4 cells, HAPLOID, DIFFERENT. MITOSIS = 2 cells, DIPLOID, IDENTICAL. If asked about gamete production: always meiosis.